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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/808,875	03/15/2001	Christopher J. Edge	10275US01	5572

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EXAMINER	
HARRISON, CHANTE E	

ART UNIT	PAPER NUMBER
2672	6

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/808,875	Applicant(s) EDGE, CHRISTOPHER J.
	Examiner Chante Harrison	Art Unit 2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 March 2001* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-43* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-43* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *3/15/01* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *1 & 2* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "(50)" at pg. 10, line 1 of the specification. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 27 and 34 are objected to because of the following informalities: inconsistent terminology with reference to AdobeRGB(50), where AdobeRGB(D50) is used elsewhere throughout the specification and claims. Appropriate correction is required.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-43 are rejected under 35 U.S.C. 102(e) as being anticipated by Jonathan Marsden et al., U.S. Patent 6,340,975 B2, January 2002.

As per independent claim 1, Marsden discloses a method comprising: obtaining a white point correction for a display device (col. 12, ll. 12-18); obtaining a chromatic correction for the display device (col. 12, ll. 10-18); and generating corrected color coordinates based on the white point and chromatic corrections (col. 12, ll. 10-44; col. 5, ll. 1-10).

As per dependent claim 2, Marsden discloses obtaining the white point correction by determining a white point correction matrix (col. 2, ll. 40-61; col. 8 ll. 10-20); and obtaining the chromatic correction by determining a chromatic correction matrix (col. 2, ll. 40-61; col. 8, ll. 5-15).

As per dependent claims 3 and 21, Marsden discloses displaying a color on a display device (Fig. 6), the color being defined by an original white point matrix in a -D50 illuminant condition (col. 7, ll. 48-61); and adjusting at least some white point matrix values so that visual appearance on the display device is visually equivalent to a print (col. 12, ll. 10-18).

As per dependent claim 4, Marsden discloses adjusting at least some white point matrix values comprises adjusting maximum phosphor settings on a display (col. 8, ll. 10-40; col. 12, ll. 12-18).

As per dependent claims 5 and 22, Marsden discloses determining a chromatic correction matrix comprises: displaying a color on a display device (Fig. 6), the color being defined by an original chromatic matrix in a D50 illuminant condition (col. 7, ll. 48-62); and adjusting at least some chromatic matrix values so that visual appearance on the display device is visually equivalent to a print (col. 8, ll. 30-40).

As per dependent claim 6,26, 33 and 40, Marsden discloses adjusting at least some chromatic matrix values comprises adjusting chromaticity values in an RGB color space (col. 7, ll. 48-61; col. 8, ll. 30-40).

As per dependent claims 7, 27 and 34, Marsden discloses adjusting chromaticity values in an RGB color space comprises adjusting chromaticity values in an AdobeRGB(d50) color space (col. 7, ll. 49-52; col. 8, ll. 30-40).

As per dependent claim 8, Marsden discloses generating corrected color coordinates based on the white point and chromatic corrections comprises generating a single correction matrix (col. 2, ll. 45-61; col. 8).

As per independent claim 9, Marsden discloses a method comprising: determining device-independent coordinates defining a color on a hard copy (col. 6,ll. 40-50); and generating corrected coordinates using the device-independent coordinates, a white point correction and a chromatic correction (col. 5, ll. 1-10; col. 12, ll. 10-44).

As per dependent claims 10 and 17, Marsden discloses displaying the color using the corrected coordinates (col. 5, ll. 1-10).

As per dependent claims 11, 18 and 42, Marsden discloses the displayed color is visually equivalent to the color on the hard copy (col. 12, ll. 10-18; col. 13, ll. 44-47).

As per dependent claims 12 and 19, Marsden discloses the white point correction is a white point correction matrix (col. 8, ll. 10-20) and the chromatic correction is a chromatic correction matrix (col. 2, ll. 45-61; col. 8, ll. 30-40; col. 12, ll. 10-18).

As per dependent claims 13 and 20, Marsden discloses determining the white point correction matrix (i.e. gamma function) (col. 8, ll. 10-15) and the chromatic correction matrix (i.e. xyz values) (col. 8, ll. 10-15).

As per independent claim 16, Marsden discloses a method comprising: converting device-dependent coordinates that define a color in a printing device to device-independent coordinates (col. 5-6, ll. 67-5; Fig. 6); adjusting the

device-independent coordinates using a white point correction and a chromatic correction (col. 5, ll. 1-10; col. 11, ll. 35-37, 57-65; col. 12, ll. 10-44); and converting the corrected device-independent coordinates to device-dependent coordinates that define a color in a display device (col. 5-6, ll. 67-5; col. 5, ll. 1-10; col. 11, ll. 35-37, 57-65; col. 12, ll. 30-44; Fig. 6). It is inherent that Marsden's disclosure of the use of a profile that contains transformation data that includes converting from device dependent coordinates to device-independent coordinates and vice versa enables the printing device having device dependent coordinates to convert its coordinates to those of the device dependent display monitor using the intermediate adjustments of the white point and chromaticities to achieve soft proofing (col. 10, ll. 39-46) in the disclosed system (Fig. 6), which illustrates a bi-directional feed of data between the printing and display devices and implements a lookup table (Fig. 6 "204a") storing the adjusted white point and chromaticity values.

As per independent claim 23, Marsden discloses a method comprising: adjusting maximum phosphor values for a display device so that a first color displayed on the display device matches white in a defined illuminant condition for a hard copy (col. 7, ll. 49-52; col. 8, ll. 30-40); and adjusting color settings so that a second color displayed on the display device matches a defined color in the defined illuminant condition (col. 7, ll. 49-52; col. 12, ll. 10-18).

As per dependent claims 24, 32 and 39, Marsden discloses the defined illuminant condition is a D50 illuminant condition (col. 7, ll. 48-52).

As per dependent claim 25, Marsden discloses adjusting color settings comprises adjusting color settings within a computer program (col. 10, ll. 15-20; col. 12, ll. 4-18).

As per independent claim 28, Marsden discloses a method comprising: creating a first visual representation of an image on a hard copy (col. 5, ll. 60-65); and creating a second visual representation of the image on a display device (col. 10, ll. 40-45), wherein the first visual representation and the second visual representation have different device-independent coordinates (col. 5, ll. 61-64; col. 6, ll. 41, 44-50), and wherein both white point and saturated colors on the display device are a good visual match to those of the hard copy (col. 12, ll. 4-18, 46-50; col. 13, ll. 44-47).

As per dependent claims 29 and 36, Marsden discloses both white point and saturated colors on the display are visually equivalent to those of the hard copy (col. 8, ll. 30-40; col. 12, ll. 10-18).

As per independent claim 30, Marsden discloses a system comprising: a display device (Fig. 6 "209"); a memory device (Fig. 6 "210"); and a processor coupled to the memory device and the display (Fig. 6 "205"), wherein the processor: obtains a white point correction for the display device from the memory device (col. 5, ll. 1-3; col. 8, ll. 30-35);

obtains a chromatic correction for the display device from the memory device (col. 5, ll. 1-3; col. 8, ll. 30-35); and generates corrected color coordinates for the display device based on the white point and chromatic corrections (col. 12, ll. 10-44).

As per independent claim 31, Marsden discloses a system comprising: a display device (Fig. 6 "209"); a memory device (Fig. 6 "210"); and a processor coupled to the display device and the memory device (Fig. 6 "205"), wherein the processor: adjusts the maximum phosphor values of the display device so that a first color displayed on the display device matches white in a defined illuminant condition for a hard copy (col. 7, ll. 49-52; col. 8, ll. 30-40); and adjusts color settings so that a second color displayed on the display device matches a defined color in the defined illuminant condition (col. 7, ll. 49-52; col. 12, ll. 10-18).

As per independent claim 35, Marsden discloses a system comprising: a display device (Fig. 6 "209"); a memory device (Fig. 6 "210"); and a processor coupled to the display device and the memory device (Fig. 6 "205"), wherein the processor: receives a first set of image data from the memory device defining a first visual representation of an image on a hard copy (col. 4-5, ll. 67-4; col. 10, ll. 38-44); creates a second set of image data defining a second visual representation of the image for display on the display device (col. 12, ll. 10-44); and displays the image on the display (col. 10, ll. 43-45); wherein the first set of image data and second set of image data have different device-independent coordinates (col. 11, ll. 48-61; col. 12, ll. 10-15, 37-42), and wherein both white point

and saturated colors of the image on the display are a good visual match to those of the hard copy (col. 12, ll. 4-18, 46-50; col. 13, ll. 44-47).

As per independent claim 37, Marsden discloses a computer readable medium carrying program code that when executed: receives a white point correction for a display device as input (col. 8, ll. 30-35); receives a chromatic correction for the display device as input (col. 8, ll. 30-35); and generates corrected color coordinates for the display device based on the white point and chromatic corrections (col. 12, ll. 10-44).

As per independent claim 38, Marsden discloses a computer readable medium carrying program code that when executed: adjusts maximum phosphor values of a display device so that a first color displayed on the display device matches white in a defined illuminant condition for a hard copy (col. 7, ll. 49-52; col. 8, ll. 30-40); and adjusts color settings so that a second color displayed on the display device matches a defined color in the defined illuminant condition (col. 7, ll. 49-52; col. 12, ll. 10-18).

As per independent claim 41, Marsden discloses a computer readable medium carrying program code that when executed: receives a first set of image data from the memory device defining a first visual representation of an image on a hard copy (col. 10, ll. 38-42); creates a second set of image data defining a second visual representation of the image for display on the display device (col. 12, ll. 10-44); and displays the image on the display (col. 10, ll. 43-45); wherein the first set of image data (col. 11, ll. 48-61) and

second set of image data (col. 12, ll. 10-15) have different device-independent coordinates (col. 11, ll. 56-61; col. 12, ll. 37-42), and wherein both white point and saturated colors of the image on the display are a good visual match to those of the hard copy (col. 12, ll. 4-18, 46-50; col. 13 ll. 44-47).

As per independent claim 43, Marsden discloses a computer readable medium carrying a color profile data structure thereon, the color profile data structure corresponding to a first device (col. 5, ll. 65-67) and including illuminant condition values that do not correspond to actual illuminant conditions associated with the first device (col. 7, ll. 15-18), wherein an image rendered on a second device using the color profile data structure is visually equivalent to the image rendered on the first device (col. 5, ll. 61-64; col. 7, ll. 39-42).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marsden as applied to claim 9 above, and further in view of Patrick Cottone, U.S. Patent 6,522,313 B1, February 2003.

As per dependent claim 14, Marsden discloses displaying a color on a display device (Fig. 6), the color being defined by an original white point matrix in a D50 illuminant condition (col. 7, ll. 49-52; col. 8, ll. 10-20); and adjusting at least some white point matrix values so that visual appearance on the display device is visually equivalent to a white printout (col. 12, ll. 10-18). Marsden fails to specifically disclose the printout viewed in the D50 illuminant condition, which Cottone discloses (col. 4, ll. 17-29). It would have been obvious to one of skill in the art to include Cottone's teaching of viewing a printout in the D50 illuminant condition with Marsden's disclosure of applying an illuminant to a display monitor and manipulating color data under the known illuminant for the benefit of creating an environment where the printout and the display data are viewed under the same conditions so as to produce colors that closely resemble the intended colors (col. 7, ll. 49-55; col. 13, ll. 43-46).

As per dependent claim 15, Marsden discloses displaying a color on a display device (Fig. 6), the color being defined by an original chromatic matrix in a D50 illuminant condition (col. 7, ll. 49-61); and adjusting at least some chromatic matrix values (col. 7-8, ll. 61-15) so that visual appearance on the display device is visually equivalent to a color printout (col. 8, ll. 30-40). Marsden fails to specifically disclose the printout viewed in the D50 illuminant condition, which Cottone discloses (col. 4, ll. 17-29). It would have been obvious to one of skill in the art to include Cottone's teaching of viewing a printout in the D50 illuminant condition with Marsden's disclosure of applying an illuminant to a display monitor and manipulating color data under the known illuminant for the benefit of creating an environment where the printout and the display data are viewed under the same conditions so as to produce colors that closely resemble the intended colors (col. 7, ll. 49-55; col. 13, ll. 43-46).

Conclusion

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Chante Harrison whose telephone number is (703) 305-3937.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi, can be reached at (703) 305-4713.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Ch

April 3, 2003